



CLIPPEDIMAGE= JP402108442A

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TITLE: BLOCK TYPE SHIFTING MOLD

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ABSTRACT:

PURPOSE: To prevent the development of crossing crack and longitudinal crack and to improve the yield of a cast slab by forming grid-like grooves on a part of casting wall in each block mold member and arranging these grid grooves in casting direction and the crossing direction at the right angle to this.

CONSTITUTION: Molten metal 12 is poured into a cavity 27 in the block caster 20 through a nozzle 14. Carrying velocities (a), (b) of the mold members 23 for upper and lower units 22 and cast slab drawing velocity (c) are suitably controlled with a computer in accordance with variations of molten metal pouring rate and molten metal surface in the cavity. The block mold member 23 has L-shape of the cross section as crossing at the right angle to the casting

direction, and the grid-like grooves 25 are formed on the long side surface 24 in the inner wall thereof. The groove 25 has V-shape of the shallow groove depth to the groove width. When the solidified shell grows, shortage of cooling to the molten metal at joint part of the mutual block mold members is developed and solidified delay is formed and shrinkage stress is concentrated and the crossing crack on the cast slab is apt to develop. The longitudinal crack is apt to develop as the same as the above. As the grid-like grooves are formed, shrinkage stress is dispersed to the whole casting wall. By this method, the development of the crack is prevented and the yield of the cast slab can be improved.

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